

## SEQUENCE LISTING

<110> Fischer, Horst  
Illek, Beate

<120> COMPOSITIONS AND METHODS FOR CYSTIC FIBROSIS THERAPY

<130> 200116.403D1

<140> US

<141> 2001-10-17

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<170> PatentIn Ver. 2.0

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&lt;210&gt; 6

&lt;211&gt; 1480

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6

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1

5

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15

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 Glu Leu Ser Asp Ile Tyr Gln Ile Pro Ser Val Asp Ser Ala Asp Asn  
 35 40 45  
 Leu Ser Glu Lys Leu Glu Arg Glu Trp Asp Arg Glu Leu Ala Ser Lys  
 50 55 60  
 Lys Asn Pro Lys Leu Ile Asn Ala Leu Arg Arg Cys Phe Phe Trp Arg  
 65 70 75 80  
 Phe Met Phe Tyr Gly Ile Phe Leu Tyr Leu Gly Glu Val Thr Lys Ala  
 85 90 95  
 Val Gln Pro Leu Leu Gly Arg Ile Ile Ala Ser Tyr Asp Pro Asp  
 100 105 110  
 Asn Lys Glu Glu Arg Ser Ile Ala Ile Tyr Leu Gly Ile Gly Leu Cys  
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 Leu Leu Phe Ile Val Arg Thr Leu Leu Leu His Pro Ala Ile Phe Gly  
 130 135 140  
 Leu His His Ile Gly Met Gln Met Arg Ile Ala Met Phe Ser Leu Ile  
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 Tyr Lys Lys Thr Leu Lys Leu Ser Ser Arg Val Leu Asp Lys Ile Ser  
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 Ile Gly Gln Leu Val Ser Leu Leu Ser Asn Asn Leu Asn Lys Phe Asp  
 180 185 190  
 Glu Gly Leu Ala Leu Ala His Phe Val Trp Ile Ala Pro Leu Gln Val  
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 Ala Leu Leu Met Gly Leu Ile Trp Glu Leu Leu Gln Ala Ser Ala Phe  
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 Cys Gly Leu Gly Phe Leu Ile Val Leu Ala Leu Phe Gln Ala Gly Leu  
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 Gly Arg Met Met Met Lys Tyr Arg Asp Gln Arg Ala Gly Lys Ile Ser  
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 Glu Arg Leu Val Ile Thr Ser Glu Met Ile Glu Asn Ile Gln Ser Val  
 260 265 270  
 Lys Ala Tyr Cys Trp Glu Glu Ala Met Glu Lys Met Ile Glu Asn Leu  
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 Arg Gln Thr Glu Leu Lys Leu Thr Arg Lys Ala Ala Tyr Val Arg Tyr  
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 Phe Asn Ser Ser Ala Phe Phe Ser Gly Phe Phe Val Val Phe Leu  
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 Phe Thr Thr Ile Ser Phe Cys Ile Val Leu Arg Met Ala Val Thr Arg  
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 Gln Phe Pro Trp Ala Val Gln Thr Trp Tyr Asp Ser Leu Gly Ala Ile  
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 Asn Lys Ile Gln Asp Phe Leu Gln Lys Gln Glu Tyr Lys Thr Leu Glu  
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 Tyr Asn Leu Thr Thr Thr Glu Val Val Met Glu Asn Val Thr Ala Phe  
 385 390 395 400  
 Trp Glu Glu Gly Phe Gly Glu Leu Phe Glu Lys Ala Lys Gln Asn Asn  
 405 410 415  
 Asn Asn Arg Lys Thr Ser Asn Gly Asp Asp Ser Leu Phe Phe Ser Asn  
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 Phe Ser Leu Leu Gly Thr Pro Val Leu Lys Asp Ile Asn Phe Lys Ile  
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 Glu Arg Gly Gln Leu Leu Ala Val Ala Gly Ser Thr Gly Ala Gly Lys  
 450 455 460  
 Thr Ser Leu Leu Met Met Ile Met Gly Glu Leu Glu Pro Ser Glu Gly

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 Lys Ile Lys His Ser Gly Arg Ile Ser Phe Cys Ser Gln Phe Ser Trp  
                                  485                      490                      495  
 Ile Met Pro Gly Thr Ile Lys Glu Asn Ile Ile Phe Gly Val Ser Tyr  
                                  500                      505                      510  
 Asp Glu Tyr Arg Tyr Arg Ser Val Ile Lys Ala Cys Gln Leu Glu Glu  
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 Asp Ile Ser Lys Phe Ala Glu Lys Asp Asn Ile Val Leu Gly Glu Gly  
                                  530                      535                      540  
 Gly Ile Thr Leu Ser Gly Asp Gln Arg Ala Arg Ile Ser Leu Ala Arg  
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 Ala Val Tyr Lys Asp Ala Asp Leu Tyr Leu Leu Asp Ser Pro Phe Gly  
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 Tyr Leu Asp Val Leu Thr Glu Lys Glu Ile Phe Glu Ser Cys Val Cys  
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 Lys Leu Met Ala Asn Lys Thr Arg Ile Leu Val Thr Ser Lys Met Glu  
                                  595                      600                      605  
 His Leu Lys Lys Ala Asp Lys Ile Leu Ile Leu Asn Glu Gly Ser Ser  
 610                      615                      620  
 Tyr Phe Tyr Gly Thr Phe Ser Glu Leu Gln Asn Leu Gln Pro Asp Phe  
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 Ser Ser Lys Leu Met Gly Cys Asp Ser Phe Asp Gln Phe Ser Ala Glu  
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 Arg Arg Asn Ser Ile Leu Thr Glu Thr Leu His Arg Phe Ser Leu Glu  
                                  660                      665                      670  
 Gly Asp Ala Pro Val Ser Trp Thr Glu Thr Lys Lys Gln Ser Phe Lys  
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 690                      695                      700  
 Ile Asn Ser Ile Arg Lys Phe Ser Ile Val Gln Lys Thr Pro Leu Gln  
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 Met Asn Gly Ile Glu Glu Asp Ser Asp Glu Pro Leu Glu Arg Arg Leu  
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 Val Leu Asn Leu Met Thr His Ser Val Asn Gln Gly Gln Asn Ile His  
 770                      775                      780  
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 Tyr Leu Arg Tyr Ile Thr Val His Lys Ser Leu Ile Phe Val Leu Ile  
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 Trp Cys Leu Val Ile Phe Leu Ala Glu Val Ala Ala Ser Leu Val Val  
 865                      870                      875  
 Leu Trp Leu Leu Gly Asn Thr Pro Leu Gln Asp Lys Gly Asn Ser Thr  
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                                  900                      905                      910  
 Tyr Tyr Val Phe Tyr Ile Tyr Val Gly Val Ala Asp Thr Leu Leu Ala  
                                  915                      920                      925

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Asp	Phe	Ile	Gln	Leu	Leu	Leu	Ile	Val	Ile	Gly	Ala	Ile	Ala	Val	Val
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Lys	Gln	Leu	Glu	Ser	Glu	Gly	Arg	Ser	Pro	Ile	Phe	Thr	His	Leu	Val
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Trp	Phe	Leu	Tyr	Leu	Ser	Thr	Leu	Arg	Trp	Phe	Gln	Met	Arg	Ile	Glu
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Lys	Cys	Lys	Ser	Lys	Pro	Gln	Ile	Ala	Ala	Leu	Lys	Glu	Glu	Thr	Glu
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Glu	Glu	Val	Gln	Asp	Thr	Arg	Leu								
		1475					1480								